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# The Natural Laws of Musical Expression,

BY

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## THE NATURAL LAWS OF MUSICAL EXPRESSION.\*

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### I.

#### LAWS OF FORCE.

**I**N every art it will be found that the effect of the beautiful can be referred to certain reasonable causes; otherwise beauty would not be worthy of that distinction which it at present enjoys. Thus the beauty of musical expression rests upon natural laws which the artist, consciously or unconsciously, observes.

Even in the delivery of a simple succession of tones of equal length, and lacking, possibly, significance of pitch—as for example those of the drum—this requirement makes itself felt. Our ear is unable to lay hold of a prolonged succession of one sort of tones; it longs for some orderly arrangement, it seeks to measure or

to count; and for that reason we are better pleased with that delivery of equal tones in which, at regular intervals of time (measures), primary and secondary accents appear.

But if the same kind of accent is continued for any length of time, our organs of hearing grow weary; we demand a change, and it is this demand which has given rise to the various kinds of rhythm. In poetry, as well, one finds a change of meter refreshing.

Still greater variety is displayed in the delivery of tones of varying duration; in such cases, especially upon the piano, the delivery is a matter of course. The tone of the piano, at first strong, gradually grows weaker, and finally ceases entirely. This fact naturally suggests the rule that whenever uniform strength of tone is indicated, each long note should be struck more forcibly than the shorter ones, since otherwise its prescribed value will not be discernible at the end.

But when a long note follows short ones, whether it is so indicated or not, the player



should lead up to it by a mediating *crescendo* in order that the necessary strength of the long note be not impaired. In like manner it is evident that *after* the long note has been struck the player should resume the soft touch, in keeping with the then diminishing strength of the long note, and linking it to the succeeding one.

When we consider compositions with a motley variety of notes, as for example sonatas, the notes seem suddenly to grow animate under the above-mentioned laws of expression; exuberant life gushes from every measure; we behold signs for delivery everywhere in ceaseless variation, provided by the notes themselves. The expression alters as strikingly as does a landscape when suddenly flooded with sunshine.

(It may be remarked here that for purely mechanical reasons, the player is inclined to the opposite style of delivery. Because he has little time for preparation *before* the long note, and plenty of time within its duration, he strikes the long note which follows short ones lightly, and those which

follow the long one forcibly. This mistake can only be avoided by increasing the muscular force in a *crescendo* culminating with the long note, and thereupon relaxing the arm while the long note is held.)

Still, it is not in piano music alone, but in song as well, that the longer note receives more accent; only, the singer transfers it to the middle of the long note, while the pianist places it at the beginning—a fact which is not sufficiently understood by all composers. Particularly in the transcription of vocal compositions for the piano, one frequently finds false signs for delivery. If in the song a *crescendo* occurs with a long note sustained through several measures, the transcriber copies the *crescendo* punctiliously, without stopping to consider that such a thing, upon the piano, is impossible of execution. Even original compositions are often thus carelessly marked; for example, the twenty-fourth measure of Mendelssohn's fourth "Song without Words" contains a *decrescendo* to the long note.

One of the most common laws requires that ascending progressions be played *crescendo*; descending, *decrescendo*. This law has its origin in song. It is easier for the singer to produce high notes loud than soft in the chest register, so that in song the practice of increasing in volume as the voice ascended, naturally became a rule.

Now we require, and for intelligible reasons, that musical interpretation shall imitate song as closely as possible. All music that we hear we sing in spirit; but in spirit we like to sing exactly as though we were singing in actuality. Hence, if the rendering does not tally with the laws of song the inner participation is made difficult for us; we are not able to follow it satisfactorily, and on that account the rendering impresses us as "cold" and unsympathetic. For this reason we demand for everything which moves sufficiently slow to admit of its being sung, exactly the same delivery as if it were a song, even though the method of producing the tones differ as radically as does that of

the piano, on which the higher notes require less strength than the lower ones.

Then again, harmonic influences, the nature of tone combinations, determine the accent.

The difference in sound of different intervals and chords is utilized by the composer in expressing a very wide range of emotions. Taken as a whole, our emotions group themselves into two classes,—the satisfactory and the unsatisfactory. The first are perfectly expressed only in the major; of joy, happiness, triumph, there is none in the minor, any more than there is grief, melancholy, revenge, in the major.

In the major, as in the minor, there is a great variety of intervals and chords. In Palestrina's day there were, it is true, only the major and minor triads; but soon these limited resources did not suffice for composers. Every art is limited by the materials with which it works. Richly endowed spirits so exhausted this same that their successors must needs have come to a standstill, unless a progress in material

or an alteration of the art form had interposed. In music this holds true for the *virtuosi* as for composers. Thus, for example, Liszt and Rubinstein would have been forced to renounce their style of playing, if more durable strings had not been invented. Richard Wagner could never have written his orchestra scores so freely in all keys with equal indifference if the chromatic mechanical wind-instruments, and the chromatic kettledrums had not been invented. In like manner there was needed in his time a multiplication of interval and chord combinations to insure an advance in musical composition. First, the composers added to the triad of the fifth degree (in c major, *d-b-g*) another third, because it sounded best there,—*f-d-b-g*; then they omitted the lowest tone of the chord and patched it up with another third on the summit; thus they built a chord of four tones upon *b*,—*a-f-d-b*, a favorite chord with Schumann. Then they moved still a third higher, upon *d*,—*c-a-f-d*, a favorite chord of Richard Wagner; and lastly they moved to *f*,—*e-c-a-f*. As to

beauty of tone, these chords take rank in precisely the order given above, but the composer can make use of them all. If, for instance, he wishes to set the words, "The sun blinded him," to music, the shriller chord of four tones, *e-c-a-f*, offers him incomparably more suitable material than the chord *f-d-b-g*.

And thus the numerous intervals and chords which have fashioned themselves in music have their complete adaptation; they constitute a set of tools which the composer uses to attain legitimately certain definite effects. When Schumann begins his *Fantasiestück*, "Warum," with the chord of the fifth degree instead of that of the first, he thereby insures the effect of interrogation. When Meyerbeer, in the "Beggar's Aria," allows Fides to sing a diminished third in the passage "Oh, my son!" he is as certain of the impression intended as in Schubert's *Serenade* the passage "And the heart for thee is yearning," is certain to give rise to a feeling of longing, through the employment of the augmented triad—that pat-

ented chord of yearning, so to speak.

With regard to this multiplication of chords be it here observed that the introduction of new chords has always provoked strong opposition, and that contemporaneous theorists have always been the last to recognize these innovations, because they were at variance with the principles which they had been teaching up to that time. Their successors, already wedded to these new combinations, discovered the logical warrant for the same, explained and substantiated them, and so, gradually, they received the right to citizenship.

This wealth of chords gives rise to real and practical difficulties in the artistic rendering of a composition; for every chord needs to be treated differently. In the case of dissonant harmonies the expert artist must above everything know and feel *which* is the dissonant tone; this he must bring into relative prominence, in order that it may not appear as an accidental misconception,—just as in speech every daring assertion which is hazarded

should stand forth with a definiteness sufficient to arouse in the hearer a confident expectation of later substantiation. When this actually follows, the hearer has the same sense of satisfaction which is produced by the resolution of a musical dissonance. Since, moreover, every musical dissonance must be resolved, the law for the accentuation of dissonances is already indicated in the study of harmony; for, indeed, every resolution (solution) implies a decrease in the density of the material involved.

If we compare the rhythm, duration, pitch, and harmonic character of the tones, we shall find that the necessity for accentuation increases as more reasons for it appear simultaneously. If, for example, a rhythmic note is at the same time long, high in pitch, and dissonant, it demands an accent for these four reasons. In compositions which portray natural emotions we find that the coincidence of such tonal attributes is of frequent occurrence.

But as music is able to offer to each one an allegory of his own emotions, the form



also changes with its representative content. Thus, it accords more closely with the requirements of our musical sense to have the long notes coincide with the beginning of the measure; they heighten the feeling of security, reliability. When, however, it is the composer's intention to agitate, to excite, he, whether consciously or unconsciously, places the long notes later, to that very end. This, for example, is the effect of the long, accented notes on the second beat, which follow the opening bar of the Rakoczy March; while, on the other hand, the long notes at the beginning of the major trio in the same march impress us as an agreeable contrast.

The treatment of any exceptional disposition of tones should naturally be a corresponding one. For example, when a long note appears *after* the beginning of the measure, both are to be accented with equal force—the beginning of the measure because it *is* the beginning, the long note because it is long; but should the long note be disproportionately longer

than the note at the beginning of the measure—a case which occurs frequently in Hungarian music—then, of course, it should be accented more strongly than the beginning of the measure, in accordance with its disproportionate value.

For example, if a descending run leads to an important long note, as in the fifty-eighth measure of Weber's Concertstück, the run must be played *crescendo*, notwithstanding its direction. But should the note which begins a measure be followed by one of equal length, both notes are to have the same accent—as for example, in Mendelssohn's fourteenth Song without Words. If, however, the higher note is at the same time longer, as in the third measure of Beethoven's G-Major Concerto, it should be accented more than the note at the beginning of the measure, because two considerations require an accent on this note, and but one on the first.

Upon a careful consideration of the influence of the above-mentioned accents, it readily appears that none of them is without effect, but that each is modified by

even the slightest alterations; and the degree of talent in an artist is revealed by his recognition and treatment of such occasional cases.

Still, it sometimes happens that the artist is forced to do otherwise than the music matter would seem to demand. If we attempt to classify the more important and characteristic styles of delivery we find that they may be best described by the terms natural, tender, soft, powerful, hard. The "natural" would be that mode which always corresponds to the written form; "soft" is that mode which, in cases where power is demanded, uses tenderness; "tender," that in which everything has a more delicate rendering; "powerful" and "hard" form the opposites.

In music, as well as in oratory, there are often exceptional accents required by a hard or powerful style of delivery. Suppose in his drama some poet represents a mother as saying, "Though the whole world should rise up against me it could never utter this reproach—that I had deserted my children!" Now, under

ordinary circumstances, the actress would give the word *this* a marked emphasis, to show that the mother takes up the gauntlet which is flung down in the first part of the sentence. But if the poet designs to represent the mother as resigned and incapable of resistance, then the decisive word *this* should be pronounced softly and drawn out somewhat. Such exceptional emphasis should be directly indicated by the poet to avoid misunderstanding.

In music the same holds good. If, for example, long notes are to be played suddenly soft, after a swift succession of strong notes, as is the case in the repetition of the first movement of Beethoven's C-major Sonata, the composer should do as Beethoven has done—write the *pianissimos* down. But should the player make such an alteration at his own discretion, he may rest assured that his rendering will have the effect of something exceptional—in the above case that of a *smorzando*—and that he alone must bear the responsibility.

In polyphonic composition it is of the utmost importance that the melody be brought out. The nature of the melody is the chief means of determining the character of the music. Italian music presents a richly ornamented melody upon a simple harmonic background; German music, on the contrary, displays a simple melody upon a rich harmonic background. By way of illustration, compare the air "Casta Diva" with Mendelssohn's first "Song without Words."

Whether the melody is Italian or German, it must be brought into utmost prominence, must rise, clear and distinct, above the accompaniment; for melody is to music what contour is to drawing: where the contour is effaced nothing is left but a blot.

As a matter of course, the player should possess sufficient ability to control the attack of the fingers. If, for example, he needs to play both strong and weak simultaneously with the same hand, he should keep the tips of the fingers which are to do the strong playing stiff; all the others

should be relaxed. The pianist should take care not to accent, for merely mechanical reasons, notes which, for example, fall upon the black keys, simply because the hand in its descent naturally strikes the black keys more heavily; nor the second note of a skip merely because the hand has made a wide sweep; and so on.

When the melody ceases or pauses, the accompaniment should advance into the foreground. In fugues, the subject, with all its modulations, should stand out clearly. When the subject is wanting we may, as a rule, play softer; in every case the answers (imitations) should be clearly marked; and in order that the ear may be prepared for the reëntry of the subject and answer, the episode should be given special prominence. The so-called augmentation of the subject, in which the notes of the subject appear doubly long, must have its notes played doubly strong to correspond.

Prolonged note-values also demand more of an accent; as for example, in the

middle movement of Reinecke's charming Impromptu upon a theme from "Manfred."

The melody sounds most distinct when the accompaniment is played *staccato*, or upon a stringed instrument *pizzicato*, which latter style is frequently imitated upon the piano—thus, for example, in the Concertstück of Weber, measures twenty-five to thirty-one, or, in Mendelssohn's B-minor Capriccio, Op. 22, measures five to eleven.

The form, also, has a not unimportant bearing upon the accentuation.

Repetitions, especially short ones, of which every tone is still fresh in memory, should not be played exactly like the original. When a thing is presented to us twice in precisely the same way, the impression produced is different each time, because the second time we have back of us the experience of the first. Accordingly, if we have perfectly grasped the meaning of a passage the first time, its immediate repetition in precisely the same fashion appears to us as superfluous.

Hence we, for the most part, prefer to hear the passage the second time a little

softer than the first. In long repetitions an altered reproduction is less imperative, because the memory is not as active as in shorter passages.

Sometimes the player has to render transcriptions of orchestral compositions upon the piano; then he will need to imitate the tonal power of the original instruments—wind instruments, even—and should play with considerable force even when a *piano* is indicated.

The player has also occasionally to imitate outward and natural phenomena, such as a mill, a thunderstorm, a fall of water, a rippling brook, the song of the nightingale. In these cases the player must strive to represent what can only with difficulty be expressed by notes.\*

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## II.

### LAWS OF VELOCITY.

It is commonly said that "Time is the soul of music." It would be more correct

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\* Fortunately he cannot hope to imitate that horrible mannerism of many singers—the tremolo. Without a pang of envy he may leave that to the more accomplished goats.



to say that time is the *pulse* of music; for time, like the pulse, only indicates the degree of emotion. The kind of emotion is expressed by harmonic agencies, by depth and color of tone. Time is accordingly only a register of the soul, not the soul itself, which is indeed the sum of all emotions. But just as it is of the utmost importance to the physician to be able to discover the reason why the pulse runs higher or lower, so must the musician ask the question why the tempo is to be taken now faster, now slower.

In the first place, it is the harmonic basis of a piece which determines the grade of tempo.

The more related chords underlie a melody, the more rapidly may the tempo be taken; just as in the use of figurative language, common comparisons may have a quick utterance. Some one says, "Today it is as hot as an oven," and he can rattle off the phrase without incurring the danger of being misunderstood. But when the poet says, "Thou art like to a flower, so holy, fair, and pure," the listener must

have time between the phrases to make the comparison between the maiden and the flower. If the figure is an appropriate one he finds it beautiful; yet if time for the comparison has not been granted him he indeed hears the words, but does not understand the sense.

It is precisely so in music; closely related chords may follow swiftly upon each other. The Champagne Song in Mozart's "Don Juan" could never be sung with so much jollity if it were founded on other than the simplest chords—triads of the first and second degree, the chords of the mouth harmonica. On the other hand, the wonderful depth of meaning in the relation of the chords of the Pilgrim Chorus from "Tannhäuser" can only be grasped in a suitably slow tempo.

Is there a change in the inner harmonic groundwork of a piece, the tempo must usually alter with it. So, for example, the first movement of the "Waldstein Sonata" of Beethoven, Op. 53, beginning with the thirty-fourth measure, should be taken more slowly, and the A-minor So-

nata of Schubert, Op. 42, from the ninth measure on, be played faster than at the beginning.

If it is necessary to moderate the tempo even when the chords belong to the same key, how much more necessary is it with modulations (transitions) into other keys. A key is like a road; so long as one keeps to the same road one does not need to vary his speed because of the road; but when one decides to change his direction one involuntarily walks with dallying step until he has definitely entered upon the new road. Especially in the so-called enharmonic changes, the musician finds a restraint imposed. In them a chord which has the same sound in two different keys is suddenly drawn into the second key, and following its lead, the passage proceeds in the new key. In such a case the player should hold the transition chord somewhat longer, in order that the listener may have time to lose, to some extent, the impression of the former key, as well as to waken his expectation that something in particular—the new key—

is about to follow. Thus, for example, the enharmonic changes in the tenth measure of the *piu mosso* of Chopin's C-sharp-minor Polonaise require the utmost deliberation.

However, when the same mode of modulation is adhered to uniformly through several keys, the result is totally different. Here again we find our analogy in speech. If we should have occasion to say, "I did thus and so, not for this one reason only, but for a second, third, fourth, fifth reason," we would not pronounce the numbers following one another, with uniform speed. In every period composed of phrases which are thus similar in form, the speaker becomes more hurried, more impassioned.

It is precisely so in music. In playing, for instance, measures nine to eighteen of the second *intermezzo* from Schumann's Kreisleriana, No. 2, we should accelerate exactly as in the above example. With each fresh repetition the modulation is more easily grasped, and for that reason we demand that each new sequence shall be played more rapidly.

Sequences (recurrences of similar chord progressions), when they are repeated in the same key, and still more when they are repeated in different keys, afford an important medium for the portrayal of passion. The most salient characteristic of passion is precisely this same obstinate adherence to one and the same thing. If we persist in the same chord succession and increase the rapidity of its execution, it becomes the symbol of passion.

The use of the sequences, so frequent now, forms a line of separation between the older school of music and that of the present; they have infused an intensity of passion into our music which formerly was not and could not have been present to the same degree. The older composers laid down for themselves a rule that the same use of chords could not be made oftener than twice, or at most, three times; hence, every sequence became a sign of poverty for composers. As a result of this strict rule their compositions maintained a uniformity of tempo which we call classic repose. There was seldom

occasion to accelerate. This barrier is now removed.

Composers have no longer need to avoid the sequence.

Even Mendelssohn in his day, complained in a letter to Moscheles that he could not succeed in conducting an *adagio* slowly to its end. The most striking proof of this self-accusation is found, perhaps, in the beautiful first movement of his F-minor Fantasie, Op. 28. Originally, this was called the Scotch Sonata. Mendelssohn evidently changed the title for the sole reason that the movement turned out too unsteady for it.

Chopin, and still more Schumann, Wagner, and Liszt, almost all the more recent composers with a few exceptions—notably Brahms—cannot get on without sequences; sequences reflect the spirit of our age.

Beethoven, it is true, employed the sequence, but he treated it for the most part dramatically. For example, he takes two sequences loud, two soft, using a different instrumentation each time, as at the close of the first movement of his C-minor

Symphony. Dealt with in this way, the sequence becomes truly dramatic; it becomes two persons or characters who alternate with each other, and of whom one is strong, the other weak.

But under our present mode of treatment the sequence is one person who, little by little, works himself up into a passion. The music of today has thus grown more subjective, and in this respect it is part and parcel of our age. The strenuous struggle for existence which on all sides is to be waged in a close, hand-to-hand combat, engenders subjectivity, nervousness; and it is not to be wondered that music shows this peculiarity, as in a mirror. If a great encyclopedist, referring to mythology, could say that mankind has made the gods in his own image, we can certainly make the same assertion with regard to art.

Assuredly the spirit of the age is not without its influence, and it could not have been a mere accident that the age of the corporation and commonwealth found the musical embodiment of its mode of

thought in the fugue. In the fugue and canon liberties in tempo are not admissible as in homophonic compositions. Homophonic compositions, as the name implies, contain only one melodic voice, progressing independently; therefore they can be played with more "freedom." Here melody is queen; all the other voices are her subjects, and if her court is a brilliant one, as with Chopin and Wagner, and even if, as in their case, she reigns over such intelligent subjects that she must allow them to put in their word now and then—still, melody is the queen, and all the other voices accommodate themselves to her needs, her moods, her caprices. It is otherwise in strict polyphony, in fugues and canons. The fugue is a commonwealth in which all voices are rated equal. One of the most obvious requirements in common life is to be allowed to eat when one is hungry. But if everyone were to insist upon eating just when he pleased, the orderly arrangements of the family would be broken up. Just so little is it admissible in music for one voice to spread



itself out at the expense of the others.

And still, even in the fugue, the spirit of the age has not passed by without leaving its impress. Mendelssohn's most beautiful piano fugue (E minor, Op. 35, No. 1) begins *andante espressivo*, and proceeds *accelerando* to *prestissimo*, a thing unheard of before; and Liszt's Hungarian Coronation Mass, a work for which I cherish the greatest respect, swarms with *accelerandi*. So, it seems, one cannot even pray calmly as of old.

That Chopin employed sequences in great numbers is easily accounted for by the fact that the majority of his compositions were, in the main, improvisations. When he composes upon the spur of the moment, even the most richly inventive musical genius finds the need of some makeshift; less, perhaps, on the organ or harmonium, however, because the player can hold the last chord until he has evolved a new thought. But upon the piano, where a break of that sort is easily noticed, some other expedient must help him out. As such, appears the repetition

of the same passage; and lest this attract attention, he transposes it, and meanwhile meditates upon new turns. In the fantasia, accordingly, the old theorists were tolerant enough to admit sequences. When these occur in fantasies of the older composers, they may be treated more freely, like those of Chopin. Thus one may accelerate in the second tempo of the C-minor Fantasy (with the Sonata) from the thirty-third to the forty-fifth measure of the first allegro.

A passage in which one may accelerate somewhat is found in all first and last movements of sonatas. It is called the elaboration of the subject or theme (*Durchführungssatz*)\* and always follows the repetition; during it the two themes of the preceding movement contend for the mastery, until the first theme appears as victor. The heat of the combat is for the most part represented by sequences; the more numerous the sequences the

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\* This portion is often called the "free fantasia"—surely an unfortunate name, as "fantasia" suggests rather an entire movement than a part of one.—GROVE'S DICTIONARY OF MUSIC.

fiercer rages the combat. Our tendency to increase the speed in such places finds support in the current rule which enjoins a *ritardando* before the reëntry of the theme. Since the theme is taken in the same tempo as at first, it is evident that we are to slacken our speed *because* we have previously played too fast.

The influence of the harmonic structure upon the tempo is not apparent in the case of sequences alone. As in walking we slow our pace whenever, through some opening, a new prospect is disclosed to our view, so in playing we like to take any new key as it occurs, more leisurely, in order to take it in. The C-sharp-major passage in Schubert's A-flat-major Impromptu, Op. 90; the B-flat-major passage in the first movement of the G-major, the C-flat-major passage in the first movement of the E-flat-major Concerto of Beethoven, lose entirely their dreamy character if the tempo be taken quite as slowly before them as afterwards.

Changes from major to minor may be prepared by means of a suitable *ritardando*.

The clever trick through which a great painter changes a laughing face to a weeping one by a single stroke of his brush is easily paralleled in music by repeating a major passage immediately in the minor. With Schubert, the childlike composer, with whom laughter and tears—major and minor—are, so to speak, in the same sack, we meet such abrupt changes in great numbers. They can only be softened by means of a tempering *ritardando* between the two moods, and by taking, as is usually done, the minor—the more gloomy and sad of the two—rather more quietly.

A noteworthy illustration of this occurs in the familiar A-minor Waltz of Chopin—the repetition of the A-major passage in the minor. This passage resembles a poem of two strophes, of which the first pictures the loveliness of the flowers, while the second laments that they have faded. If the poem were recited the elocutionist would have to insert a pause between the two strophes, to accord with the sense. This pause stands for the interval in which the change took place. Just so should

it be with musical interpretation; there should be a slight delay between the major and the minor; the minor should slacken its speed somewhat.

Dissonances, too, exert an influence upon the tempo. Dissonances, and among them the so-called long appoggiatura, are the sighs of music. But sighs are long, deep breaths accompanied by painful emotions. If, therefore, we hold these dissonant notes longer, give them more emphasis, their analogy to sighs will be involuntarily suggested. If the first note in measures twenty-one to twenty-four of the Finale of Beethoven's C-sharp-minor Sonata—and still more the third measure of the middle movement of Schubert's A-flat-major Impromptu—are not sustained somewhat, the passages concerned will fail of their characteristic sighing expression.

Dissonant notes occur more frequently in our music than formerly; their multiplication is indeed a sign of our age. Its nervousness, its sensitive, excitable organization, finds in them its expression. Sometimes, however, we have overdone

in this regard. After a concert whose numbers were exclusively modern compositions, the deceased theorist Sechter said: "I do not comprehend the composers of today. From sheer excess of inspiration they no longer hear what they compose."

The so-called perfect cadences exercise considerable influence upon the tempo. When a dominant chord is followed by a triad of the same key within the compass of an octave (in C major, e. g., *b-g-d-g*, *c-g-e-c*), this chord progression gives the impression of a close. In order to prepare for this close, we are inclined to retard such cadences, particularly at the end of the piece. With Bach and Handel especially, a *ritardando* is required, because Bach does not, like Beethoven and others, announce the approaching close by suggestive chord repetitions. If we do not retard toward the close in playing Bach, the piece will seem to the listener to end too soon, even though it may have already lasted too long for his pleasure. The extent to which Italian singers use the ca-

dence to insure a brilliant exit is evinced in the facetious definition, "A cadence is an applause-provoking passage of shrieks."

With pauses or *fermati* we generally retard (e. g., Beethoven, G-major Sonate, Op. 14, No. 2), excepting in cases where the dramatic pause is intended to produce the effect of the terrible (Beethoven, D-major Sonata, Op. 10, eighth measure after the repetition in the first movement).

Occasionally there are in music, as in speech, quotations—as, for example, in Schumann's "Faschungsschwank from Vienna," the introduction of the Marseillaise, or, in Hummel's E-flat-major Sonata, the Hallelujah. Such quotations must be played in "quotation marks,"—that is, more broadly.

Closer than these considerations to the player comes the question whether a passage shall be played *legato* or *staccato*. The second fugue (C-minor) from the first volume of Bach's "Well-tempered Clavichord" is marked *legato* in Taussig's edition and *staccato* in Czerney's. Well exe-

cuted, either is beautiful; but each rendering produces a different effect. The *legato* gives the impression of a song; the *staccato* (and even the *pizzicato*) gives the impression of rhythmic movements. If we hear this same fugue *legato* we can distinguish in it the lament of an unhappy human being; if we hear it *staccato* we see some one anxiously fumbling about in the dark. The *legato* seems in a certain degree to affect the ear only; the *staccato* appeals to the eye as well.

Pitch also has an effect upon the tempo. Since the singer cannot execute wide intervals as rapidly as those near together, we should, in rendering calm, song-like passages, play the wide intervals which are interspersed with smaller ones, more slowly; thus, for example, the last quarter of the twentieth measure of Weber's A-flat-major Sonata, or the fifth measure before the pause preceding the last, in the B-minor Capriccio of Mendelssohn.

The longer the skip, the more time may we take. In the eighty-fifth measure of Schubert's A-flat-major Impromptu, Op.



90, we take more time than in the eighty-first measure of the same piece.

High notes may be sustained somewhat in a slow tempo. Be it here observed that compositions with a single voice give the impression of two voices as soon as they move in skips of wide intervals. Thus the twentieth *Étude* in Czerney's "School of Velocity" carries, in each hand, the idea of two voices.

The rhythmical division of the notes also affects the tempo. Dotted notes, minute divisions, such as occur in the Bach *Sarabands*, retard the tempo. Rhythmically simple successions of notes, as those, for example, in Czerney's "School of Velocity," hasten the tempo.

The recitative admits of the greatest freedom in tempo; in it the fullest attention can everywhere be paid to the distinctive character of the music. In the recitative, chord arpeggios which move in the tonal succession of the so-called harmonic progression, as at the beginning of the *Polonaise Fantasia* of Chopin, Op. 64, may be played slowly, commencing at the

bass, *accelerando* to the treble. But everywhere, on the piano as well, the recitative must *sing*; and for that reason a sound knowledge of song is of the greatest value.

Thus, for example, the notes of a recitative are often without designation of value. The composer presupposes in recitative an understanding of musical declamation, and expects that the practiced artist will depend upon his own intelligence to find the proper phrasing. If one does not himself sing, he should not fail to hear operatic and oratorio music, to cultivate a correct taste for the recitative.

Not alone in the recitative, however, but in compositions with a marked rhythm, there is often no indication whatever of the tempo. This was more frequently the case formerly than now; yet even today, e. g., in Brahms' variations upon a theme from Handel, we find no tempo marked. But whoever infers from this that these variations, so radically different in character, should be ground out in a uniform tempo deserves to be pelted.

Moreover, the writing out of exact signs

for delivery is an extremely difficult and tiresome matter. In this regard the fastidious pianoforte composer, St. Heller, is a model.

It is worth one's while to notice how often the musician, even in *ad libitum* playing, preserves a uniformity in the tempo. Beethoven made extremely clever provision for this when, in the close of the *Coriolanus Overture*, he wrote out for the 'celli a dying melody in note-values so admirably adapted that the simple maintenance of the tempo produced an effect of the most delicate phrasing.

After so much has been said concerning liberties in music, it is indeed high time to give warning against the abuse and exaggeration of these liberties in tempo. Many of them are taken so unconsciously that the artist himself who uses them fancies that he is in perfect time, until the metronome convinces him of the contrary.

In the simpler forms of composition, as for example, songs, fantasies, nocturnes, and the like, one may allow himself greater

liberties than in heavier works. He who has a long way to go must not stop to notice every trifle; but it is particularly to be observed that a careful consideration of pitch, harmonic structure, and the like, is more imperative in slow than in fast tempo.

Here, too, we find our analogy in life. If, for instance, we notice on our way to the railway station that we have a full hour to spare, we may perhaps turn considerably aside rather than crush a lovely forget-me-not that blossoms in our path; but if we hear the signal of the approaching train, we would trample down a whole flower bed without a pang of conscience. In rapid tempo there is one watchword: "Get there on time." The more rapid the tempo the more does the rhythm acquire the ascendancy. In fast playing it is somewhat as in a battle; the greater the number of combatants the more impetuous is the onset and the farther do personal considerations retreat into the background. Schiller's Wallone, in "Wallenstein's Camp," says:

The steeds loud snorting, and on they go!  
Whoever may lie in the mid career—  
Be it my brother or son so dear—  
Should his dying groan my heart divide,  
Yet over his body I needs must ride,  
Nor pitying stop to drag him aside.

With the increase in the number of voices, and still more with the increase in the number of players, the necessity for a rigid discipline in the matter of rhythm becomes more pressing. Musicians who play exclusively compositions of Chopin's order, in which variations in tempo are allowed,—nay, even demanded,—will eventually find themselves unable to play strictly in tempo.

For such, practicing with the metronome is the best remedy, and as a preparation for *ensemble* playing it is indispensable. If one plays with others, one must in addition to his own measure take heed to that of the other performers. If one practices with the metronome one is thus accustomed to hearing a second measure.

Many times the concert player finds that he has to throw overboard the interpretation which he has laboriously worked

out at home; the fast tempo in which he has studied will very possibly sound ill, because the tone of the accompanying instruments is stronger. Everything requires more breadth. Sometimes in *dilettanti* orchestras the members lack the ability to follow the artist, etc., etc. Should the soloist be unable to renounce his own conception and conform to the conditions present, he will probably fall out with the orchestra, or at least the rendering will be stiff; for every tempo demands its own peculiar delivery. If, however, the player has, by way of precaution, studied a slower and a faster tempo in addition to the one which he has fixed upon as correct, then there can be for him no tempo embarrassments.

In *ensemble* pieces the concert player will only find the *tempo rubato* safe in solo passages. If the accompaniment continues to play with him, he should accent rhythmically in whatever passages the accompaniment pauses or syncopates.

If the accompaniment contains rhythmic motives it is not then strictly neces-

sary for the soloists to accent rhythmically.

We frequently find the tempo indicated by metronome marks; on these it is not well to rely with too much confidence.

When Beethoven was requested by the Philharmonic Society of London to send the metronome marking of the Ninth Symphony he was unable to find the manuscript in question, and concluded therefore to set down the metronome numbers anew. Just as he had completed the work the old manuscript turned up and showed, to the astonishment of the finder (Schindler), important differences.

If, now, there had been, in point of fact, only *one* correct tempo, then Beethoven himself was in error. But if Beethoven could make a mistake, what mortal can maintain that his tempo is correct? And still it is possible that Beethoven was right both times.

When the writer of this treatise had affixed the metronome marks to his Variations, Op. 31, with extreme conscientiousness and afterwards accidentally tested

the numbers with another metronome, he found to his amazement that all the tempos were marked too slow. His once faultless metronome had by some accident become rusted, and beat decidedly slower than it should.

It would be a mistake, except one were playing for a dance, to try to play always in agreement with the metronome, just as it is inadmissible to allow the meter of a poem to thrust its pulsations continually upon the attention.

One has only to hear with what taste and freedom Strauss directs when he is *not* playing for a dance.

It may be further said that the musician should take care lest he alter the tempo for mechanical reasons alone.

Thus, for example, the piano pupil is likely to play slow notes following rapid ones, too quickly, because he is unable to suddenly check the wrist concerned in the run; he hurries on, toward the upper portion of the keyboard, because the keys of the higher octaves move more easily; after difficult passages he inclines to pro-



ceed with more haste; he holds notes during rests, because the hand *dawdles* upon the keys; he cuts rests short, because his arm, burdened with its own weight, drops too soon; extensions and skips he has a tendency to play more slowly; in swift figures he fails to strike with his stiff fourth finger, or else strikes too lightly, so that the finger which follows it comes in too soon, from which reason he fancies that he hurries, because he has too much speed. Sometimes he hurries and lags simultaneously with the two hands, because the difficulties are assigned unequally,—as for example, when both hands play a scale in opposite directions, beginning together, in which case the right usually hurries, because the keys move more easily, while the left retards, because the keys give more resistance. Or the pianist plays un- rhythmically, because he cannot calculate in his head or make the divisions properly, etc., etc.

But even when he is in condition to maintain throughout the tempo designated, he should, as we have seen above,

test the tempo, even when the metronome signs are present; he should do this all the more readily when the tempo is dependent upon momentary conditions.

It is, for example, by no means a matter of indifference, as regards the tempo, what is the nature of the instrument and of the place concerned in the production of a given work. As Czerney aptly says in his edition of Bach's "Well-tempered Clavichord," the same fugue requires to be played more slowly upon the organ than upon the piano.

The same adagio can be played slower upon a sonorous piano than upon one whose tone is thin. A singer with a broad, powerful voice will sing rather more slowly than another whose voice is lighter. The singer Artot, a remarkable artist, disguised her weak high notes by a clever *ritardando* which concealed their defects. (Time heals all wounds.)

Even passing dispositions play an important part, and likewise the room itself, as has been mentioned before, is not without significance for the tempo. The

larger the apartment the less prudent is it to force the tempo.

Leopold Mozart, the excellent teacher of his son, the great Wolfgang Amadeus, says in his Violin School: "And finally, in playing a solo one should consider the place in which one is to play. In a small room a rapid trill will have a better effect. If, on the contrary, one is playing in a large hall where there is an echo, or at a considerable distance from his hearers, a slower trill will be better."

Accordingly, it would seem that expression is sometimes susceptible of measurement by the cubic foot.

This remark admonishes the author that it is high time he ceased to extend the measure of his own expression.

If he shall have succeeded in inducing in those who have followed him a belief in the existence of natural laws for musical expression, he will consider himself richly rewarded for many hours of thought and study.

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